ZOOLOGY.—*A new species of polychaete worm of the family Ampharetidae from Massachusetts.* MARIAN H. PETTIBONE, University of New Hampshire, Durham, N. H. (Communicated by Fenner A. Chace, Jr.)

In working over the polychaetous annelids in the Woods Hole region, a new species of ampharetid was found in a salt pond—James Pond on Martha's Vineyard, Mass. It is referred to the genus *Hypaniola* Annenkova, which previously contained a single species, namely, *Hypaniola kowalewskii*, known from the Caspian Sea. *Hypaniola*, as well as the closely related *Hypania* Ostroumov and *Parhypania* Annenkova, includes species noted for their euryhaline properties. The new species is named in honor of Milton Gray, who collected the specimens. The types are deposited in the U. S. National Museum (no. 24734).

Family AMPHARETIDAE

Genus **Hypaniola** Annenkova, 1927; char. emend.

Type species: *Hypaniola kowalewskii* (Grimm, 1877) Annenkova, 1927, in Caspian Sea. Prostomium trilobed, with or without glandular crests (without in type species; a variable character depending on amount of folding?), with two eye spots. Retractile oral tentacles smooth (not pinnate). Paleae present but poorly developed, delicate, inconspicuous. Branchiae three or four pairs, fused basally. Without pair of dorsal hooks posterior to branchiae (as in *Melinna*). Notosetae begin on segment 3, present on 17 thoracic segments. Notopodia without cirri. Thoracic uncinigerous pinnules begin on segment 6 (setigerous segment 4). Thoracic uncini with a vertical row of teeth. Abdominal uncini with three vertical rows of teeth (type species) or a single row (*H. grayi*). Abdominal uncinigerous pinnules without cirri (type species) or with cirri (*H. grayi*). Pygidium without anal cirri. Nephridia 3 pairs, in segments 4–6 (setigerous segments 2–4).

Hypaniola grayi, n. sp.

Fig. 1, A–M

Size.—Length 9–15 mm., greatest width 1–1.5 mm.

Description.—Body inflated anteriorly, tapered gradually to a narrower posterior end (Fig. 1, A). Body wall thick, opaque, and distinctly segmented on ventral side; very thin, transparent, iridescent, and indistinctly annulated on dorsal side. Prostomium trilobed, the median lobe widest anteriorly, may be flat (in life, Fig. 1, E) or somewhat folded so as to form a more depressed median part and lateral longitudinal crests (Fig. 1, B); basal part a transverse raised area with a pair of lateral eyespots; lateral lobes encircle the median lobe laterally and posteriorly. First achaetous or buccal segment extended ventrally forming a rounded lobe under the prostomium, as long as the next three segments (Fig. 1, B–C). Oral tentacles may be completely retracted within the mouth or more or less extended; they are digitiform, smooth, up to 20 in number, in pairs arranged dorsoventrally on a somewhat folded tentacular membrane, longest and largest near midline, gradually becoming smaller and shorter laterally (Fig. 1, D).

Second or paleal segment with a raised ridge into which the prostomium and buccal segment may be partially withdrawn, the ridge being especially prominent middorsally (Fig. 1, B–C, F); with first pair of branchiae and weakly developed paired lateral bundles of paleal setae. Paleae in each bundle seven or eight in number, forming a spreading bundle, small, very delicate, iridescent, tapering gradually to slender capillary tips, as long as the thoracic notosetae but more delicate (easily overlooked). Segments 3–5 (thoracic setigerous segments 1–3) short, crowded, with cylindrical notopodia bearing notosetae, and with the next three pairs of branchiae. Branchiae four pairs, subequal, long, tapering, subulate, first pair on paleal segment, second pair more laterally on first setigerous segment, third pair more dorsally on second setigerous segment (second and third branchiae almost in transverse line due to crowding of setigerous segments 1–2), fourth pair on setigerous segment 3, in line with the first pair (Fig. 1, A–C, F). The bases of the four branchiae form a close group, with their basal portions distinct but fused to one another on the paleal segment.

Thoracic region with cylindrical notopodia containing bundles of notosetae on 17 segments (beginning on segment 3; Fig. 1, A, C, H–J). Notosetae widest basally, tapering gradually

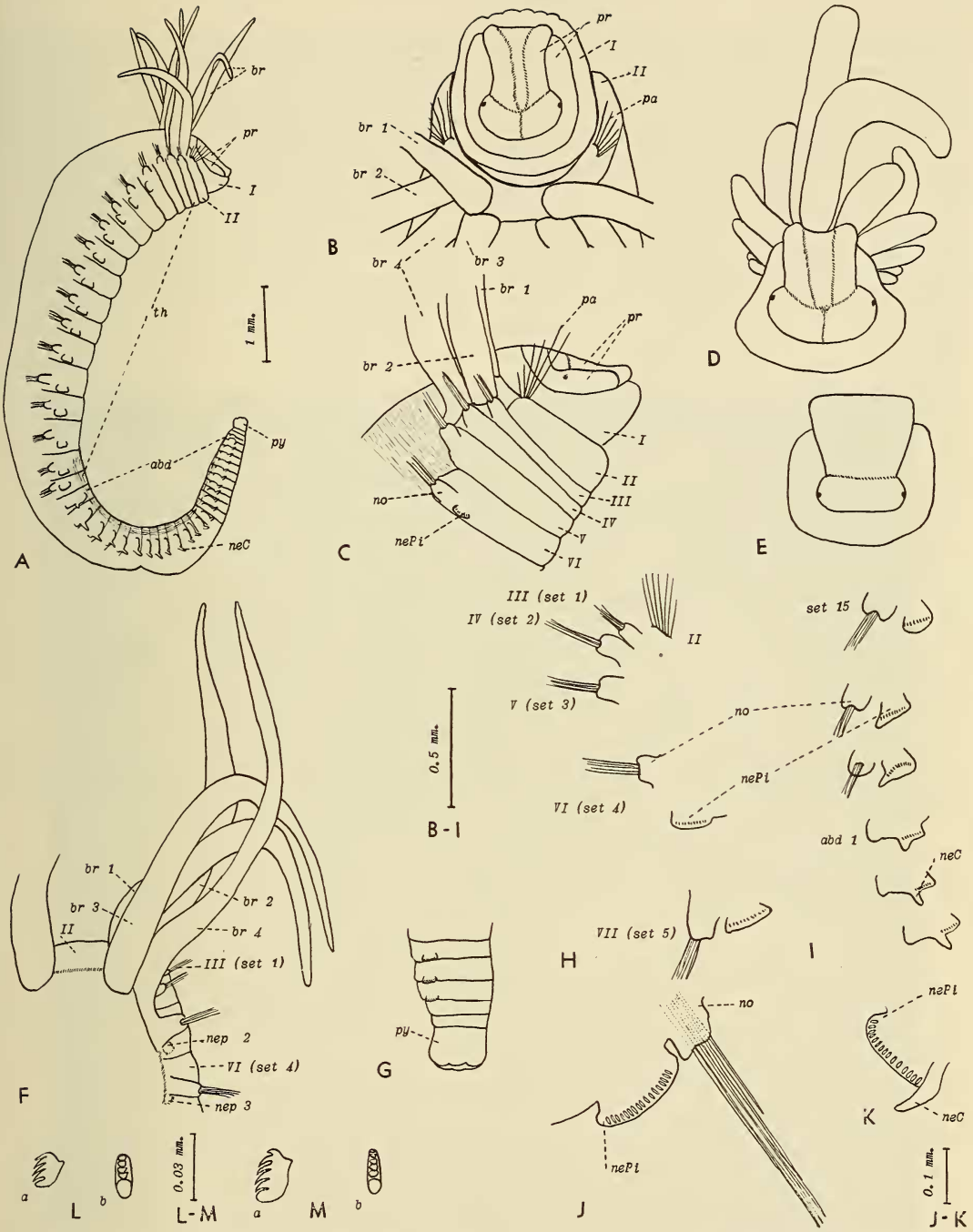

FIG. 1.—*Hypaniola grayi*, n. sp.: A, Lateral view entire animal; B, dorsal view prostomium, first two segments, and bases of branchiae; C, lateral view anterior end, with bases of branchiae only shown; D, dorsal view prostomium and extended oral tentacles; E, dorsal view prostomium (sketched in life); F, dorsal view right group of branchiae and first few thoracic segments; G, lateral view posterior end; H, parapodia of first few segments from right side; I, parapodia of last few thoracic segments and first few abdominal segments from right side; J, parapodium from thoracic region; K, parapodium from abdominal region; L, thoracic uncinus, (*a*) lateral view, (*b*) frontal view; M, abdominal uncinus, (*a*) lateral view, (*b*) frontal view. (*abd*, abdominal uncinigerous segment; *br*, branchia; *neC*, neuropodial cirrus; *nep*, nephridial papilla; *nePi*, neuropodial uncinigerous pinnule; *no*, notopodium; *pa*, paleal setae; *pr*, prostomium; *py*, pygidium; *set*, setigerous segment; *th*, thoracic setigerous segment; *I*, first or buccal segment; *II*, second or paleal segment; *III*, third or first thoracic setigerous segment, etc.)

to slender capillary tips. Thoracic neuropodial uncinigerous pinnules begin on segment 6 (setigerous segment 4); pinnules without cirri or may be short cirri on upper parts of pinnules on few of more posterior thoracic segments (Fig. 1, H–I). Thoracic uncini pectiniform, with four teeth in a single row above the rounded basal part (Fig. 1, L). Abdominal region with achaetous remnants of notopodia on about first six abdominal segments (Fig. 1, I), with uncinigerous pinnules on 22–25 segments (may have one or two achaetous posterior rings; Fig. 1, G), with neuropodial cirri on upper parts of pinnules (Fig. 1, I, K); abdominal uncini pectiniform, with five teeth in single row above rounded basal part (Fig. 1, M). Pygidium short, rounded, without papillae or cirri, may be somewhat lobulated (Fig. 1, G). Anus terminal. Posterior end, including pygidium and last few uncinigerous segments, may be turned inside. Nephridial papillae 3 pairs, posterior to notopodia on segments 4–6 (setigerous segments 2–4; Fig. 1, F).

Color: in life, greenish with whitish spots; in alcohol, colorless or slightly brownish. Tube several times the length of the animal, rather straggly, composed of debris and few light-colored sand grains or may be composed mostly of light-colored sand grains and a small amount of debris.

Remarks.—*Hypaniola grayi* differs from *H. kowalewskii* (Grimm, 1877; see Annenkova, 1927, 1929; known from the Caspian Sea) as follows: The prostomium is shaped differently; there are four pairs of subequal branchiae (*H. kowalewskii* has three or four pairs of branchiae; when the fourth pair is present, it is rudimentary); the abdominal pinnules have cirri (without in the Caspian species); abdominal uncini with five teeth in a vertical row (in *H. kowalewskii*, uncini with 15 or 16 teeth in three vertical rows).

Locality.—James Pond (salt pond), Martha's Vineyard, Mass., found by digging in sandy mud under water, collected by M. B. Gray, August 8, 1950, August 25, 1951, and August 21, 1952. It was found along with other polychaetes, as *Haploscoloplos fragilis* (Verrill), *Heteromastus filiformis* (Claparède), and *Polydora ligni* Webster.

REFERENCES

ANNENKOVA, N. *Über die pontokaspischen Polychaeten. I. Die Gattungen* Hypania *Ostroumov und* Hypaniola, *n. gen.* Ann. Mus. Zool. Acad. Sci. URSS. **28:** 48–62, 1 pl. 1927.

———. *Über die pontokaspischen Polychaeten. II. Die Gattungen* Hypaniola, Parhypania, Fabricia *und* Manayunkia. Ann. Mus. Zool. Acad. Sci. URSS. **30:** 13–20, 2 pls. 1929.

MALACOLOGY.—*Review of the living species of* Echinochama.

DAVID NICOL, U. S. National Museum.

A few months before the publication of my paper on *Echinochama* (1952), I received 10 specimens of the genus from Dr. H. S. Lopes, of the Instituto Oswaldo Cruz, Rio de Janeiro, Brazil, and Dr. C. N. Gofferjé, of the Museu Paranaense, Curitiba, Brazil. The material was collected on the coast of the State of Santa Catarina, Brazil. Besides the fact that these specimens extend the recorded range of the genus considerably, they are also distinctive enough morphologically to be considered a heretofore undescribed species. This paper contains a description of the new species and a review of the living species of the genus as well as its geographic distribution.

Genus **Echinochama** Fischer, 1887

Type species.—(Monotypy) *Chama arcinella* Linné, 1767. Recent, Caribbean Sea.

Echinochama brasiliana Nicol, n. sp.

Figs. 1–4

Description.—Shell thick, large; generally higher than long; ratio of convexity to height 0.80; number of spine rows from 18 to 29, averaging 24 for 10 specimens; spine rows closely spaced and most spines small and closely spaced; largest specimen 61.6 mm high, 54.3 mm long, convexity 52.6 mm; smallest specimen 40.5 mm high, 39.7 mm long, convexity 32.0 mm; average height 51 mm; average length 46 mm, average convexity 41 mm.